

## ABSTRACT

An improved structure of a protective cover assembly of a gas sensor is provided. The protective cover assembly is of a  
5 double-walled structure made up of an inner and an outer cylindrical cover with gas holes. A sensing element is disposed within the inner cover. At least one of the gas holes of the outer cover partially faces a side wall of the inner cover. A top end surface of the inner cover lies within a range defined between  
10 opposed portions of a perimeter of the at least one of the gas holes of the outer cover closest to a top and a base end of the cover assembly, respectively. This structure works to avoid breakage of the sensing element arising from wetting with water and to improve a response rate of the gas sensor.